BUREAU OF AUTOMOTIVE REPAIR

PROPOSED REGULATIONS

SMOG CHECK INSPECTION PROCEDURES

Legend:

Originally proposed changes are shown as underline to indicate additions and strikethrough to indicate deletions.

Omitted text is indicated by (* * * *).

(1) Amend Section 3340.1 of Article 5.5, Chapter 1, Division 33, Title 16, California Code of Regulations, to read as follows:

§ 3340.1. Definitions.

- "Acceleration Simulation Mode" or "ASM" means a type of vehicle emissions test conducted with the test vehicle on a chassis dynamometer to simulate on-road acceleration operating conditions.
- "After repairs test" means a test performed on a vehicle after repairs have been made to that vehicle as a result of failing an inspection at a smog check station.
- "ARD-exempt heavy-duty station" means a smog check test-and-repair station or a smog check test-only station that only tests and/or repairs commercial vehicles which have a gross vehicle weight rating of 10,000 pounds or greater.
- "Basic area" or "Basic vehicle inspection and maintenance program area" means the smog check program conducted in any area of the state which is not classified as an enhanced vehicle inspection and maintenance program area.
- "BAR-97 Emissions Inspection System" or "EIS" means tamper-resistant test equipment meeting the requirements of subsection (a) of section 3340.17 of the California Code of Regulations and is certified by the bureau for use in the Smog Check Program. The EIS collects and measures emissions data, and where applicable OBD data, then transmits inspection results to the Vehicle Information Database.
- "Bureau" or "BAR" means the Bureau of Automotive Repair.
- "Chassis dynamometer" is a treadmill-like device for a vehicle that is used to simulate on-road acceleration operating conditions.
- "Clean piping," for the purposes of Health and Safety Code section 44072.10(c)(1), means the use of a substitute exhaust emissions sample in place of the actual test vehicle's exhaust in order to cause the EIS to issue a certificate of compliance for the test vehicle.
- "Comparative Failure Rate" or "CFR" means that the station's failure rate, under the Gold Shield Program, must be comparable to the test-only station failure rate for all non-directed vehicles of the same model-year. The station's failure rate, using initial tests, by model-year, of non-directed vehicles is applied to an industry-wide failure rate for test-only stations, calculated quarterly by smog check program area, using initial tests, by model-year, of non-directed vehicles inspected, and includes an allowable deviation to compensate for the random

distribution of passing and failing vehicles based upon a 95 percent confidence level. This paragraph shall remain in effect through December 31, 2012.

"Consumer Assistance Program" or "CAP" means a program of the Bureau of Automotive Repair that provides eligible motor vehicle owners the options of Repair Assistance and Vehicle Retirement.

"Dismantler" means an automobile dismantler, as defined in Section 220 of the Vehicle Code and licensed pursuant to Section 11500 of the Vehicle Code, who has contracted with the Bureau to retire vehicles from operation.

"Emissions inspection system" or "EIS" means a tamper resistant instrument which meets the requirements of subdivision (b) of section 44036 of the Health and Safety Code and which is certified by the bureau for use in the California Smog Check program.

"Enhanced area" or "Enhanced vehicle inspection and maintenance program area" means the smog check program conducted in any part of an urbanized area of the state which is classified by the Environmental Protection Agency as a serious, severe or extreme nonattainment area for ozone or a moderate or serious nonattainment area for carbon monoxide with a design value greater than 12.7 ppm.

"Excessive Test Deviation Rate" occurs under any of the following circumstances in a calendar quarter:

- (1) The rate for which the ignition timing test is not performed exceeds the statewide average for similar vehicles where 90% of similar vehicles received the test.
- (2) The rate for which the fuel cap test is not performed exceeds the statewide average for similar vehicles where 90% of similar vehicles received the test.
- (3) The rate for which the low pressure fuel evaporative test is not performed exceeds the statewide average for similar vehicles where 90% of similar vehicles received the test.
- (4) The rate for which the OBDII inspection is not performed exceeds the statewide average for similar vehicles where 90% of similar vehicles received the test.
- (5) The rate for which inspections are aborted exceeds 125% of the statewide average for similar vehicles on test equipment of the same manufacturer.
 - (6) The rate for which inspections are restarted exceeds 125% of the statewide average for similar vehicles.
- (7) The rate for which vehicles are initially inspected with the maximum allowable number of OBDII readiness monitors unset, as specified in Section 3340.42.2 (b), exceeds 125% of the statewide average for similar vehicles.

"Follow-up Pass Rate" (FPR) means a performance measure that evaluates whether vehicles previously certified by each station or technician are passing, in their current cycle, at higher than expected rates. Expected rates are calculated by averaging passing rates for similar vehicles, and then adjusting the rates to account for an individual vehicle's odometer reading, the type of emissions inspection (ASM or TSI) performed in the current inspection cycle on the vehicle, the amount of time since the last certification for the vehicle, and the initial test results in the previous inspection cycle. An FPR score is assigned to both licensed smog check stations and technicians, and is based on the current inspection cycle test results of vehicles that were previously certified by stations and technicians. An FPR score ranges from zero to one, with zero representing the lowest possible score and one representing the highest possible score. FPR data reports are updated in January and July each

year. Stations and technicians with insufficient inspection histories from which to calculate an FPR score will not receive an FPR score.

"Gaseous fuel" means fuel composed of propane, liquefied or compressed natural gas.

"Gear Shift Incident" means an inspection where data from the VID indicates the technician did not follow the gear selection procedure specified in the Smog Check Inspection Procedures Manual that is incorporated by reference in Section 3340.45.

"Gold Shield station" means a registered Automotive Repair Dealer who is also a smog check test-and-repair station which has been certified by the department and meets all the requirements specified in Article 10 of these regulations. This paragraph shall remain in effect through December 31, 2012.

"Heavy duty vehicle" means a vehicle with a manufacturer's gross vehicle weight rating of 8501 pounds or more.

"Household" means a family of persons or any group of two or more unrelated persons that reside together and share common living expenses.

"Implementation area" means a geographical area, in which a local district has requested implementation of a biennial inspection program pursuant to section 44003 of the Health and Safety Code.

"Initial test" means the first Smog Check inspection of a vehicle done in official test mode or pre-test mode and performed within one hundred eighty (180) days prior to a registration renewal date or a change of ownership date for that vehicle. An initial test does not include tests that are aborted before completion or tests done in the training or manual modes of the EIS.

"Non-directed vehicle" means a vehicle that was not required to be inspected at a station pursuant to Sections 44010.5 or 44014.7 of the Health and Safety Code.

"OBD Inspection System" or "OIS" consists of an OBD Data Acquisition Device or (DAD) working in conjunction with commercial off-the-shelf computer, bar code scanner, data entry device, and printer. The DAD is the test equipment that meets the requirements of subsection (b) of section 3340.17 of the California Code of Regulations and is certified by the bureau for use in the Smog Check Program. The DAD facilitates OBD data transfer between the inspected vehicle and the OIS computer. The OIS computer relays inspection information to and from the DAD to the Vehicle Information Database (VID).

"Repair Assistance" means a component of the Consumer Assistance Program (CAP) that provides financial assistance for emissions-related repairs to help eligible motor vehicle owners bring their vehicles into compliance with the requirements of the Smog Check Program.

"Repair-Only station" means a station licensed by the bureau to diagnose and repair vehicles in the smog check program.

"Revivable Junk Receipt" means a receipt showing proof that the vehicle is recorded and titled as "junked" by the Department of Motor Vehicles.

"Similar Vehicle Failure Rate" or "SVFR" means a calendar quarter comparison of the initial test failure rate of vehicles at an individual station to the initial test failure rate for similar vehicles inspected statewide, taking into account the vehicle odometer reading, time since passing the last inspection, and initial test results in the

previous cycle. Vehicles for which data is not available to adequately establish an initial test failure rate will not be used in the SVFR calculation. This paragraph shall become effective July 1, 2012.

"Similar vehicles" means vehicles with the same Vehicle Lookup Table Row ID, or at a minimum, vehicles with the same model-year, make, and engine displacement.

"Smog Check Inspector" or "Inspector" means an individual licensed by the bureau to inspect, and certify the emissions control systems on vehicles subject to the Smog Check Program in all areas of the state.

"Smog check program" or "program" means the motor vehicles inspection program conducted pursuant to section 44005 of the Health and Safety Code, and as hereby described in this article.

"Smog Check Repair Technician" or "Repair Technician" means an individual licensed by the bureau to diagnose, adjust, and repair the emissions control systems on vehicles subject to the Smog Check Program at smog check stations in all areas of the state.

"Smog check station" or "station" means a smog check test-only station or smog check test-and-repair station licensed by the bureau in the smog check program.

"Smog check technician" or "technician" means an individual who holds a smog check repair technician and/or inspector license pursuant to section 3340.28 of this article.

"Smog check test-and-repair station" or "test-and-repair station" means a smog check station licensed by the bureau to test, inspect, diagnose and repair vehicles in the smog check program.

"Smog check test-only station" or "test-only station" means a smog check station licensed by the bureau to test and inspect vehicles in the smog check program.

"STAR" means a voluntary certification program that applies to a registered Automotive Repair Dealer that is also a licensed smog check test-and-repair station or a test-only station that meets all requirements specified in Article 10 of these regulations.

"Technician Information Table" means the bureau's electronic list of licensed technicians authorized to perform official Smog Check inspections at a specific station.

"Test Deviation" occurs under any of the following conditions:

- (1) The station fails to inspect ignition timing on a vehicle that should receive this test.
- (2) The station fails to perform the fuel cap test on a vehicle that should receive this test.
- (3) The station fails to perform the low pressure fuel evaporative test on a vehicle that should receive this test.
- (4) The station fails to perform an OBDII inspection on a vehicle that should receive an OBDII inspection.
- (5) The station aborts an inspection.
- (6) The station restarts an inspection.
- (7) The station performs an initial inspection on a vehicle with the maximum allowable number of OBDII readiness monitors unset, as specified in Section 3340.42.2 (b).

"Two-Speed Idle" or "TSI" means a type of vehicle emissions test conducted with the vehicle transmission in neutral or park while the engine is run at two different engine speeds.

"Vehicle Information Database" or "VID" means a centralized computer database and computer network, which is readily accessible by all licensed smog check technicians on a real time basis.

"Vehicle Inspection Report" or "VIR" means an official smog check inspection report that is printed from an <u>OIS emissions inspection system</u> or <u>EIS</u> and given to the registered vehicle owner(s) or their legal representative.

"Vehicle Retirement" means a component of the Consumer Assistance Program (CAP) that provides payments to eligible motor vehicle owners who choose to voluntarily retire their vehicles from operation rather than make emissions-related repairs to bring the vehicles into compliance with the requirements of the Smog Check Program.

"VLT Row ID" means the vehicle lookup table row identification number that identifies a vehicle using information about its body type, model-year, make, model, engine displacement, and transmission type.

Note: Authority cited: Sections 44001.5, 44002, 44072.10, 44091 and 44095, Health and Safety Code; and Section 9882, Business and Professions Code. Reference: Sections 44001.3, 44005, 44010.5, 44011, 44012, 44014, 44014.2, 44014.5, 44017, 44017.1, 44030, 44036, 44037.1, 44056, 44062.1, 44070, 44072.10, 44092, 44093, 44094 and 44103, Health and Safety Code; Sections 220 and 11500, Vehicle Code; and Section 11505, Government Code.

(2) Amend Section 3340.16 of Article 5.5, Chapter 1, Division 33, Title 16, California Code of Regulations, to read as follows:

§ 3340.16. Test-Only Station Requirements.

- (a) A smog check test-only station operating in other than an enhanced program area shall have all testing equipment and emission application and reference manuals necessary to test and/or inspect all affected vehicles, including the following:
- (1) An emissions inspection system, in accordance with the bureau's BAR 97 Emissions Inspection System Specifications as provided in subsection (a) of section 3340.17 of this article.
 - (2) An ignition timing light, which measures ignition advance.
 - (3) A hand vacuum pump and a vacuum gauge.
 - (4) Basic hand tools necessary to inspect vehicle ignition, fuel delivery, and emission control systems.
- (5) A device capable of retrieving trouble codes from vehicles with on board computers, along with instructions on how to extract codes, and definitions of codes found.
- (6) The most currently available emission control system application information as contained in any of the nationally distributed and periodically updated manuals that address emission control systems applications; vacuum routing diagrams for all vehicles being tested; electronic component location manuals; and specifications for those functional tests currently prescribed by the bureau.
 - (7) The most currently available bureau manuals and bulletins.

- (8) An evaporative emission control inspection system that meets subsections (a) through (h) and (j) of section 2.8 of the emissions inspection system specifications referenced in subsection (b) of section 3340.17 of this Article.
- (9) Low-pressure fuel evaporative test equipment that has been certified by the bureau as compliant with the Low Pressure Fuel Evaporative Tester (LPFET) Specifications dated October 2006 and hereby incorporated by reference. The test equipment shall be maintained and calibrated in accordance with the LPFET Specifications referenced in this paragraph and in accordance with the manufacturer's specifications. Vehicle data low pressure fuel evaporative test results shall be transmitted to a database specified by the department in accordance with the procedures contained in the LPFET Specifications referenced in this paragraph, which include the form, manner and frequency of data transmittals.
- (b) A smog check test only station operating in an enhanced program area shall have all of the equipment and materials specified by and conform to the requirements of subsection (a) above, except for paragraphs (1) and (5), and an emissions inspection system in accordance with the bureau's BAR-97 Emissions Inspection System Specifications as provided in subsection (b) of section 3340.17 of this article. A smog check test only station operating in an enhanced area shall have a tire pressure gauge capable of accurately measuring tire pressure at the specification for the vehicles being tested and inspected using the ASM test procedure.
- (a) A smog check test-only station shall meet the requirements for equipment and materials as specified in the Smog Check Manual referenced in section 3340.45.
- (e)(b) A smog check test-only station shall post conspicuously, in an area frequented by consumers, a notice to the effect that the station is licensed to test vehicles only, and cannot make any required diagnosis or repairs to a vehicle which has failed a smog check test.
- (d)(c) A smog check test-only station shall not engage in any automotive repair work.
- (e)(d) Effective through December 31, 2012, no smog check test-only station may refer a consumer to a particular automotive repair dealer or provider of smog check repair services. The test-only station shall make available to each customer a list prepared by the bureau of all smog check stations in that region licensed to make repairs of vehicular emission control systems, which shall include licensed stations certified under the Gold Shield program. Stations and technicians are prohibited from altering or revising the list supplied by the bureau. For the purpose of this subsection, the term "make available" means to grant access to.
- (f)(e) Effective January 1, 2013, no smog check test-only station may refer a consumer to a provider of smog check repair services in which the owner of the test-only station has a financial interest.
- (1) A financial interest includes any ownership in both stations, or any compensation for business referrals by either station including, but not limited to, direct payment, barter agreements, or "quid pro quo" arrangements.
- (2) The test-only station shall provide consumers with instructions regarding how to access on the bureau's website an updated list, compiled by region, of stations licensed to make repairs of vehicular emission control systems, including STAR test-and-repair stations.
- (g)(f) Effective through December 31, 2012, a smog check test-only station shall not have ownership in, corporate interest in, nor any other financial interest in a smog check test-and-repair station within a geographical radius of 50 statute miles of the test-only station.

(h)(g) A smog check station owned either wholly or partially by the same party(s) that owns a station that provides repair services, which is located adjacent to, or in the same business park, strip mall, or industrial complex as the first station, shall not qualify as a test-only station.

Note: Authority cited: Sections 44001.5, 44002, 44013 and 44036, Health and Safety Code; and Section 9882, Business and Professions Code. Reference: Sections 44010, 44012, 44013, 44014, 44014.5, 44015, 44017.1, 44033, 44036 and 44037.1, Health and Safety Code.

(3) Amend Section 3340.16.4 of Article 5.5, Chapter 1, Division 33, Title 16, California Code of Regulations, to read as follows:

§ 3340.16.4. Smog Check Repair-Only Station Requirements.

- (a) A smog check repair-only station operating in any program area shall meet the requirements for equipment and materials as specified in the Smog Check Manual referenced in section 3340.45. have the equipment and materials specified by, and conform to the requirements of, subsection (a) of section 3340.16 of this article except for paragraphs (1) and (9) and, in addition, shall have engine diagnostic equipment and repair tools that are capable of diagnosing and repairing engine ignition systems, fuel systems, emission control systems, computer engine control systems, and other related components for each vehicle type that the station diagnoses and repairs. The equipment or repair tools may be separate units, or part of a multi-functional unit. At a minimum, the station shall have the following materials, tools, and equipment:
- (1) An ignition analyzer or ignition oscilloscope capable of displaying ignition system operation of vehicles subject to the smog check program. At a minimum, the device shall display:
 - (A) Primary ignition system voltage and coil oscillations; and
- (B) Firing voltage and spark duration of the secondary ignition in either analog or digital form. For distributor equipped systems, the device shall be capable of displaying this information for all cylinders at the same time.
 - (2) A compression tester.
 - (3) A tachometer/dwell meter.
 - (4) A fuel pressure gauge capable of measuring the higher pressures of fuel-injected vehicles.
 - (5) A propane enrichment kit.
 - (6) An ammeter capable of measuring amps and milliamps.
 - (7) A high impedance digital volt/ohmmeter.
- (8) Hand tools necessary to adjust, maintain, and repair vehicular ignition, fuel delivery, and emission control systems.
- (9) Diagnostic and repair information for all vehicles being tested and repaired. Such information may be in printed or electronic form and may be nationally distributed and periodically updated references that contain repair and emission procedures. These references must be up to date and include current model year supplements for automobile emission control systems. Electronic references shall be provided in printed form upon request from the bureau.
 - (10) The most currently available bureau test and repair manuals.

- (11) Automotive computer diagnostic and repair manuals.
- (12) Electronic component location manuals.
- (13) A device capable of retrieving trouble codes from vehicles with on board computers, along with instructions on how to extract codes, and definitions of codes. This device shall have the ability to display and store data streams from the on-board computer systems of vehicles. The device shall be On-Board Diagnostic II compliant, and shall have enhanced diagnostic test modes. Diagnostic data modules required to operate the device shall be kept updated to the current available calendar year.
- (14) An electronic device capable of graphically displaying any electrical or electronic signal used by an automotive computer system. The device shall have the capability of displaying the electrical or electronic signal using a voltage and time scale that is adjustable. The device shall have the capability of capturing and displaying a high frequency abnormal signal, regardless of time per division setting, or screen refresh rate.
 - (15) A tire pressure gauge capable of accurately measuring tire pressure.
- (b) A station may be licensed and operate without the equipment prescribed in subsection (a) paragraphs 1, 3 and 5 if that station, as a matter of policy, repairs vehicles powered by diesel engines or engines origination from diesel compression ignition designs only.
- (c) All diagnostic and repair equipment shall be, as necessary, calibrated or adjusted in accordance with the instructions of the manufacturer, and maintained in good working condition.
- (d)(b) A smog check repair-only station shall not accept a vehicle for repair if the station does not have the necessary equipment, tools, personnel, diagnostic and repair materials to repair that vehicle. The station may reject a vehicle if, as a matter of policy, the station: any of the following conditions apply:
- (1) The station does not have adequate equipment, personnel, tools or reference materials to repair the vehicle, should the vehicle fail its inspection; or
 - (12) The station, as a matter of policy, Ddoes not repair certain types, makes or models of vehicles; or
 - (23) The station, as a matter of policy, dDoes not repair certain types of vehicle inspection failures.
- (e)(c) A smog check repair-only station may not refer a consumer to a particular station for a smog check inspection or repair services in which the owner of the repair-only station has a financial interest.
- (1) A financial interest includes any ownership in both stations, or any compensation for business referrals by either station including, but not limited to, direct payment, barter agreements, or "quid pro quo" arrangements.
- (2) A repair-only station shall provide consumers with instructions regarding how to access on the bureau's website an updated list, compiled by region, of STAR certified smog check stations.

Note: Authority cited: Section 44002, Health and Safety Code; and Section 9882, Business and Professions Code. Reference: Sections 44010.5, 44012, 44014.5 (e), 44014.7, 44030(b) and 44036(b), Health and Safety Code.

(4) Amend Section 3340.16.5 of Article 5.5, Chapter 1, Division 33, Title 16, California Code of Regulations, to read as follows:

§ 3340.16.5. Test-and-Repair Station Requirements.

- (a) A smog check test-and-repair station operating in any program area shall meet the requirements for equipment and materials as specified in the Smog Check Manual referenced in section 3340.45 have the equipment and materials specified by, and conform to the requirements of, subsection (a) of section 3340.16 and subsection (a) of section 3340.16.4 of this article.
- (b) A smog check test and repair station operating in an enhanced area shall have all of the equipment and materials specified by, and conform to the requirements of subsection (a) above, and:
- (1) An emissions inspection system in accordance with the bureau's BAR-97 Emissions Inspection System Specifications as provided in subsection (b) of section 3340.17 of this article.
- (2) A tire pressure gauge capable of accurately measuring tire pressure at the specification for the vehicles being tested and inspected using the loaded mode test procedure.
- (e)(b) A smog check test-and-repair station that has accepted a vehicle for inspection shall disclose both orally and in writing on the written estimate provided pursuant to Section 9884.9 of the Business and Professions Code, before the initial inspection of the vehicle, if the vehicle is potentially affected by any of the following conditions:
- (1) The station does not have adequate equipment, personnel, tools or reference materials to repair the vehicle, should the vehicle fail its inspection; or
 - (2) The station, as a matter of policy, does not repair certain types, makes or models of vehicles; or
 - (3) The station, as a matter of policy, does not repair certain types of vehicle inspection failures.
- (d)(c) Effective through December 31, 2012, a smog check test-and-repair stations shall not refer a consumer to a particular test-only station for the testing and certification of a vehicle that has been directed to a test-only station for its biennial smog check pursuant to Section 44010.5 and 44014.7 of the Health and Safety Code. Test-and-repair stations shall make available to each customer that presents a test-only directed vehicle for initial testing a list prepared by the bureau of those smog check test-only stations in that region licensed to perform initial tests of, and to certify test-only directed vehicles. Stations and technicians are prohibited from altering or revising the list supplied by the bureau. For the purpose of this subsection, the term "make available" means to grant access to.
- (e)(d) Effective January 1, 2013, a smog check test-and-repair station may not refer a consumer to a STAR certified station in which the owner of the test-and-repair station has a financial interest for the purpose of having the vehicle inspected pursuant to Sections 44010.5 and 44014.7 of the Health and Safety Code.
- (1) A financial interest includes any ownership in both stations, or any compensation for business referrals by either station including, but not limited to, direct payment, barter agreements, or "quid pro quo" arrangements.
- (2) Stations that are not STAR certified shall provide consumers with instructions regarding how to access on the bureau's website an updated list, compiled by region, of STAR certified smog check stations.
- (f)(e) Effective through December 31, 2012, a smog check test-and-repair station shall not have ownership in, corporate interest in, nor any other financial interest in a smog check test-only station within a geographical radius of 50 statute miles of the test-and-repair station.

(5) Amend Section 3340.17 of Article 5.5, Chapter 1, Division 33, Title 16, California Code of Regulations, to read as follows:

§ 3340.17. Test Equipment, Electronic Transmission, Maintenance and Calibration Requirements.

- (a) Each smog check test-only and test-and-repair station operating in other than an enhanced program area shall have a BAR certified emissions inspection system, as specified in subsection (b), except that the hardware and the software necessary to conduct dynamometer based, loaded mode emissions shall not be required. Vehicle data emission test results shall be transmitted to the department's centralized data base in accordance with the procedures contained in the specifications referenced in subsection (b), which include the form, manner and frequency of data transmittals. The emissions inspection system shall be maintained and calibrated in accordance with the specifications referenced in subsection (b), and in accordance with the manufacturer's specifications. The emissions inspection system shall have the most current software and hardware updates required by the bureau.
- (b)(a) Each smog check test only and test and repair station operating in an enhanced area shall have aThe BAR-certified Parissions iInspection sSystem (EIS), that shall meets the specifications contained in the BAR-97 Emissions Inspection System Specifications dated, May 1996, as revised through July 2009, which is hereby incorporated by reference. Vehicle data emission test results shall be transmitted to the department bureau's centralized data base database in accordance with the procedures contained in these specifications, which include the form, manner and frequency of data transmittals. The emissions inspection system EIS shall be maintained and calibrated in accordance with the bureau's BAR-97 Emissions Inspection System Specifications referenced in this subsection, and in accordance with the manufacturer's specifications. The EIS shall be calibrated only with bureau approved gases that are certified in accordance with section 3340.18 of this article. The emissions inspection systems EIS shall have the most current software and hardware updates required by the bureau.
- (b) The OBD data acquisition device shall meet the specifications contained in the OBD Data Acquisition Device Specification dated, August 2011, which is hereby incorporated by reference.
- (c) Vehicle data and test results from the OBD Inspection System (OIS) shall be transmitted to the bureau's centralized database.
- (c) All other diagnostic and repair equipment shall be maintained in good working condition. All equipment requiring calibration or adjustment shall be calibrated or adjusted in accordance with the instructions of the manufacturer, as approved by the bureau.
- (d) An emissions inspection system shall only be used within a building and shall not be used in an environment that would subject the emissions inspection system to excessive heat, cold, dust, or moisture. The specifications for environmental conditions are referenced in the bureau's "BAR Exhaust Gas Analyzer Specifications" dated 1980, as herein incorporated by reference, and in the BAR-97 Emissions Inspection System Specifications referenced in subsection (b) of this section.

- (e) Emissions inspection systems shall be calibrated only with BAR-approved gases that are certified in accordance with section 3340.18 of this article.
- (f) Only bureau-authorized representatives or authorized manufacturer representatives shall have access to the following for service, inspection, or replacement: the locked areas of the EIS, emissions inspection system the components or software located within the Low-Pressure Fuel Evaporative Test (LPFET), the components or software located within the OBD Data Acquisition Device. for service or inspection.
- (e) The LPFET equipment shall meet the specifications contained in the LPFET Specification dated January 2012, hereby incorporated by reference. Vehicle data emission test results shall be transmitted to the bureau's database in accordance with the procedures contained in the LPFET specification, which include the form, manner and frequency of data transmittals. The LPFET equipment shall be maintained and calibrated in accordance with the bureau's LPFET specification referenced in this subsection, and in accordance with the manufacturer's operating instructions. The LPFET equipment shall have the most current software and hardware updates required by the bureau.
- (g)(f) Emission inspection systems Any EIS, LPFET or OBD Inspection System (OIS) that the bureau finds does not comply with the hardware and software requirements and specifications established in this article will be disabled from communicating with the bureau's centralized computer database and network, also known as the Vehicle Information Database (VID), and thereby preventing prohibited from being used to perform smog check inspections, and the to-transmittal of certificates of compliance to the Department of Motor Vehicles, until they are brought into compliance. When any non-compliant EIS, LPFET or OIS communicates with the VID, database, the database will the Bureau will send a command from the database to disable the ability of the EIS, LPFET or OIS to issue certificates of compliance and to perform Smog Check tests or inspections.
- (h) All emissions inspection systems prescribed by subdivision (b) of section 44036 of the Health and Safety Code and used in the smog check program must be connected via modem to a standard, single-party business telephone line, or in the alternative to a high-speed or broadband connection, in order to transmit required program information. The telephone line, or high speed or broadband connection, must not be used for any other purpose, nor may it be connected to more than one emissions inspection system, nor may it have call waiting or any other special feature that would interfere with the modem's operation or the operation of the high-speed or broadband connection. Smog Check stations shall keep this telephone line, or high-speed or broadband connection, connected to the emissions inspection system at all times.

Note: Authority cited: Sections 44002, 44036 and 44037.1, Health and Safety Code; and Section 9882, Business and Professions Code. Reference: Sections 44012, 44036 and 44037.1, Health and Safety Code.

(6) Amend Section 3340.18 of Article 5.5, Chapter 1, Division 33, Title 16, California Code of Regulations, to read as follows:

§ 3340.18. Certification of Emissions Inspection System Calibration Gases and Blenders of Gases.

Emissions inspection system calibration gases used by smog check stations and gas blenders who provide such calibration gases shall be certified by the bureau in accordance with the requirements of the bureau's "Specifications and Accreditation Certification Procedures for Calibration and Audit Gases Used in the

California Emissions I/M Program" publication dated January 1990<u>January 2012</u>, as herein incorporated by reference.

Note: Authority cited: Sections 44002, 44036, Health and Safety Code. Reference: Sections 44036.5, Health and Safety Code.

(7) Amend Section 3340.42 of Article 5.5, Chapter 1, Division 33, Title 16, California Code of Regulations, to read as follows:

§ 3340.42. Smog Check Emissions Test Methods and Standards.

Smog check inspection methods are prescribed in the Smog Check Manual, referenced by section 3340.45. With the exception of diesel-powered vehicles addressed in subsection (f) of this section, the following emissions test methods and standards apply to all vehicles:

- (a) All vehicles subject to a smog check inspection, shall receive one of the following test methods:
- (a)(1) A loaded-mode test, except as otherwise specified, shall be the test method used to inspect 1976 1999 model-year vehicles, except diesel-powered, registered in the enhanced program areas of the state. The loaded-mode test shall measure hydrocarbon, carbon monoxide, carbon dioxide and oxides of nitrogen emissions, as contained in the bureau's specifications referenced in subsection (b) (a) of Section 3340.17 of this article. The loaded-mode test shall use Acceleration Simulation Mode (ASM) test equipment, including a chassis dynamometer, certified by the bureau.

On and after March 31, 2010, exhaust emissions from a vehicle subject to this inspection shall be measured and compared to the emissions standards shown in the <u>Vehicle Look-up Table (VLT)</u> Row Specific Emissions Standards (Cutpoints) Table, dated March 2010, which is hereby incorporated by reference. If the emissions standards for a specific vehicle <u>isare</u> not included in this table then the exhaust emissions shall be compared to the emissions standards set forth in TABLE I or TABLE II, as applicable. A vehicle passes the loaded-mode test if all of its measured emissions are less than or equal to the applicable emission standards specified in the applicable table.

- (b)(2) A two-speed idle mode test, unless a different test is otherwise specified in this article, shall be the test method used to inspect 1976 1999 model-year vehicles, except diesel-powered, registered in all program areas of the state, except in those areas of the state where the enhanced program has been implemented. The two-speed idle mode test shall measure hydrocarbon, carbon monoxide and carbon dioxide emissions at high RPM and again at idle RPM, as contained in the bureau's specifications referenced in subsection (ba) of Section 3340.17 of this article. Exhaust emissions from a vehicle subject to this inspection shall be measured and compared to the emission standards set forth in this section and as shown in TABLE III. A vehicle passes the two-speed idle mode test if all of its measured emissions are less than or equal to the applicable emissions standards specified in Table III.
- (3) An OBD-focused test, shall be the test method used to inspect gasoline-powered vehicles 2000 model-year and newer, and diesel-powered vehicles 1998 model-year and newer. The OBD test failure criteria are specified in section 3340.42.2.
- (b) In addition to subsection (a), all vehicles subject to the smog check program shall receive the following:
- (1) A visual inspection of emission control components and systems to verify the vehicle's emission control systems are properly installed.

- (2) A functional inspection of emission control systems as specified in the Smog Check Manual, referenced by section 3340.45, which may include an OBD test, to verify their proper operation.
- (c)(1) In the enhanced program areas, heavy-duty vehicles shall be tested using the loaded-mode test provided in subsection (1) of this section, unless:
 - (A) The vehicle has a drive axle weight that exceeds 5,000 pounds when the vehicle is unloaded, or
 - (B) The vehicle is classified by the Department of Motor Vehicles as a motorhome, or
- (C) The vehicle has a body and/or chassis configuration or modification made for business purposes that renders the vehicle incompatible with loaded mode testing, or
 - (D) The emission inspection system prompts the technician to perform the two-speed idle test.
- (2) For the purposes of this subsection, the term "unloaded" shall mean that the vehicle is not currently transporting loads for delivery or is not carrying items of a temporary nature, but excludes items that have been welded, bolted or otherwise permanently affixed to the vehicle, and tools, supplies, parts, hardware, equipment or devices of a similar nature that are routinely carried in or on the vehicle in the performance of the work for which the vehicle is primarily used.
- (3) For the purposes of this subsection, modifications that render a vehicle incompatible with loaded mode testing shall not include any tire, wheel, body or chassis modifications made for other than business purposes.
- (4) If it is determined that a heavy-duty vehicle cannot be subjected to a loaded-mode test for any of the reasons set forth in subparagraphs (A) through (D) of paragraph (1) of this subsection, the technician shall perform a two speed idle test. The technician shall also note on the final invoice the justification for the performance of a two-speed idle test.
- (c) Vehicles shall be subject to any of the inspection methods in subsection (a) and (b), regardless of program area, unless the following conditions apply:
- (1) Vehicles identified by the bureau as having operational or physical incompatibility with inspection equipment,
 - (2) Vehicles 2000 model-year and newer with OBD systems that exhibit operational problems,
- (3) Vehicles randomly selected pursuant to Health and Safety Code section 44014.7 for the purpose of identifying operational problems pursuant to Health and Safety Code section 44010.5.
- (d) Pursuant to section 39032.5 of the Health and Safety Code, gross polluter standards are as follows:
- (1) A gross polluter means a vehicle with excess hydrocarbon, carbon monoxide, or oxides of nitrogen emissions pursuant to the gross polluter emissions standards included in the tables described in subsections (a) and (b), as applicable.
- (2) Vehicles with emission levels exceeding the emission standards for gross polluters during an initial inspection will be considered gross polluters and the provisions pertaining to gross polluting vehicles will apply, including, but not limited to, sections 44014.5, 44015, and 44081 of the Health and Safety Code.

- (3) A gross polluting vehicle shall not be passed or issued a certificate of compliance until the vehicle's emissions are reduced to or below the applicable emissions standards for the vehicle included in the tables described in subsections (a) and (b), as applicable. However, the provisions described in section 44017 of the Health and Safety Code may apply.
- (4) This subsection applies in all program areas statewide to vehicles requiring inspection pursuant to sections 44005 and 44011 of the Health and Safety Code.
- (e) In addition to the test methods prescribed in this section, the following tests shall apply to all vehicles, except diesel-powered vehicles, during the Smog Check inspection:
- (1) A visual inspection of the vehicle's emissions control systems. During the visual inspection, the technician shall verify that the following emission control devices, as applicable, are properly installed on the vehicle:
 - (A) air injection systems,
 - (B) computer(s) and related sensors and switches,
 - (C) crankcase emissions controls, including positive crankcase ventilation,
 - (D) exhaust gas after treatment systems, including catalytic converters,
 - (E) exhaust gas recirculation (EGR) systems,
 - (F) fuel evaporative emission controls,
 - (G) fuel metering systems, including carburetors and fuel injection,
 - (H) ignition spark controls, and
- (I) any emissions control systems that are not otherwise prompted by the Emissions Inspection System, but listed as a requirement by the vehicle manufacturer.
- (2) A functional inspection of the vehicle's emission control systems. During the functional inspection, the technician shall conduct, as applicable, the following tests and verifications of the vehicle:
 - (A) proper operation of the exhaust gas recirculation (EGR) system,
 - (B) a check of the gasoline filler cap's integrity,
 - (C) proper setting of ignition timing,
 - (D) a low pressure check of the fuel evaporative control system,
 - (E) proper operation of the malfunction indicator light (MIL) or "Check Engine Light," and
 - (F) an on-board diagnostics (OBD) system test.
 - (3) A liquid leak inspection of the vehicle's fuel storage and delivery systems.
 - (4) An inspection of the vehicle's tailpipe and crankcase for the emissions of smoke.

- (f) On or after January 1, 2010, all 1998 model year and newer diesel-powered vehicles, with a gross vehicle weight rating of 14,000 or less pounds, are subject to the Smog Check Program. The following required inspections apply to all diesel-powered vehicles:
- (1) A visual inspection of the vehicle's emissions control systems. During the visual inspection, the technician shall verify that the following emission control devices, as applicable, are properly installed on the vehicle:
 - (A) computer(s) and related sensors and switches,
 - (B) crankcase emissions controls,
 - (C) exhaust gas after treatment systems, including catalytic converters and particulate filters,
 - (D) exhaust gas recirculation (EGR) systems,
 - (E) fuel metering systems, including fuel injection, and
- (F) any emissions control systems that are not otherwise prompted by the Emissions Inspection System, but listed as a requirement by the vehicle manufacturer.
- (2) A functional inspection of the vehicle's emission control systems. During the functional inspection, the technician shall conduct, as applicable, an on board diagnostics (OBD) system test.
 - (3) An inspection of the vehicle's tailpipe and crankcase for the emissions of smoke.

Delete from regulations the "Visible Smoke Test Failure Consumer Information Sheet," form SMOKE INFO (01/07).

Note: Authority cited: Sections 44001.5, 44002, 44003, 44012, 44012.1, 44013 and 44036, Health and Safety Code; and Section 9882, Business and Professions Code. Reference: Sections 39032.5, 44002, 44003, 44005, 44010, 44011, 44011.3, 44012.1, 44013, 44014, 44014.5, 44014.7, 44015, 44017.1, 44032, 44033, 44036, 44037.1, 44062.1 and 44081, Health and Safety Code; and Sections 9884.8 and 9884.9, Business and Professions Code.

(8) Amend Section 3340.42.2 of Article 5.5, Chapter 1, Division 33, Title 16, California Code of Regulations, to read as follows:

§ 3340.42.2. Pass/Fail Criteria for <u>Test Methods and Standards for the</u> On-Board Diagnostic <u>Inspection</u> <u>System Readiness Monitors</u>.

- (a) Effective until the implementation of subsection (c), Smog Check stations and Smog Check technicians shall conduct tests and inspections in accordance with the Bureau's BAR-97 Emissions Inspection System Specifications referenced in subsections (a) of Section 3340.17. All applicable 1996 and newer model-year spark ignition passenger vehicles and trucks under 14,001 Gross Vehicle Weight Rating (GVWR) shall be given a test of the On-Board Diagnostic (OBDII) systems. The OBDII test consists of a visual check of the Malfunction Indicator Light (MIL) and a functional test of the readiness indicators and fault code retrieval system.
- (b) <u>Effective until the implementation of subsection (c)</u>, On and after January 1, 2010, model-year 1996 through 2000 vehicles having more than two (2) incomplete emissions related readiness monitors, and vehicle model-

years 2001 and newer having more than one (1) incomplete emissions related readiness monitor shall fail the OBDII portion of the inspection. Until this subsection is implemented, aAll vehicle model-years 1996 and newer having more than two (2) incomplete emissions related readiness monitors shall fail the OBDII portion of the inspection.

- (c) Starting on or after January 1, 2013, OBD equipped vehicles shall fail the OBD inspection if any one of the following conditions occurs as applicable to the vehicle:
 - (1) The vehicle's MIL does not illuminate when the ignition is on and the engine is off;
 - (2) The vehicle's MIL illuminates continuously or flashes with the engine running;
 - (3) The vehicle's OBD system reports the MIL as commanded on;
 - (4) The vehicle's OBD system reports a Diagnostic Trouble Code (DTC);
- (5) The vehicle's OBD system data indicates the system has not yet been sufficiently operated to determine the presence or absence of a DTC;
 - (6) The vehicle's OBD system does not communicate with the EIS or OIS;
 - (7) The vehicle's OBD system data is inappropriate for the vehicle being tested;
- (8) The vehicle's OBD system data does not match the original equipment manufacturer (OEM) or an Air Resources Board (ARB) exempted OBD software configuration;
 - (9) The vehicle's OBD system reports incomplete readiness monitor(s) as specified below:
 - (A) Gasoline-powered vehicles model-years 1996 through 1999 with more than one (1) incomplete monitor;
- (B) Gasoline-powered vehicles model-years 2000 and newer with any incomplete monitors, excluding the evaporative system monitor;
 - (C) Diesel-powered vehicles model-years 1998 through 2006 with any incomplete monitors;
- (D) Diesel-powered vehicles model-years 2007 and newer with any incomplete monitors, excluding the particulate filter system monitor.
- $\frac{(e)(d)}{(e)}$ For the purposes of this section:
- (1) On-Board Diagnostics (OBDH) means a system of vehicle component and condition monitors controlled by an on-board computer designed to alert the motorist when emission control components or vehicle emission systems are not functioning properly.
- (2) A <u>rReadiness monitor(s) are a status indicator reported by the OBD system that</u> indicate whether or not <u>monitors of</u> specific emission control devices or systems <u>have run a self-diagnostic test</u> has run a self-diagnostic test to determine whether or not the device or system is functioning properly.

- (3) Diagnostic Trouble Code (DTC) is an alphanumeric code which is set in a vehicle's on-board computer when the OBD system detects an emission control device or system failure.
- (4) Malfunction Indicator Light (MIL) is illuminated on the dashboard when the OBD system has detected an emission control device or system failure. Alternatives may include a "Service Engine Soon" or "Check Engine" message, or an unlabeled picture of an engine.

Note: Authority cited: Sections 44001.5, 44002, 44003, 44013 and 44036, Health and Safety Code; and Section 9882, Business and Professions Code. Reference: Sections 39032.5, 44002, 44003, 44005, 44010, 44011, 44013, 44014, 44015, 44032, 44033, 44036, 44037.1 and 44062.1, Health and Safety Code; and Sections 9884.8 and 9884.9, Business and Professions Code.

(9) Amend Section 3340.45 of Article 5.5, Chapter 1, Division 33, Title 16, California Code of Regulations, to read as follows:

§ 3340.45. Smog Check Inspection Procedures Manual.

- (a) All vehicle emission tests, visual inspections of the emissions control systems, functional inspections of the emissions control systems, liquid fuel leak inspections, and visible smoke tests shall be conducted at licensed smog check stations by licensed smog check technicians. The All Smog Check inspections shall be performed in accordance with the Emissions Inspection System test prompts and the inspection requirements and procedures prescribed in the following:
- (1) Bureau's Smog Check Inspection Procedures Manual, dated August 2009, which is hereby incorporated by reference. This manual shall be in effect until subparagraph (2) is implemented.
- (2) Smog Check Manual, dated January 2012, which is hereby incorporated by reference. This manual shall become effective on or after January 1, 2013.

Note: Authority cited: Section 44002, Health and Safety Code; and Section 9882, Business and Professions Code. Reference: Sections 44002, 44003, 44005, 44010, 44011, 44011.3, 44012, 44012.1, 44013, 44014, 44014.5, 44014.7, 44015 and 44032, Health and Safety Code.